Predicting Audit Qualifications Using Firm-Specific and Audit Related Characteristics and Effect of Regulations: Turkish Case

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Abstract

The purpose of this study is to provide some evidence on the effects of some auditor-related, firm specific and legal factors on issuance of modified audit opinions. The study covers Turkish firms listed in Istanbul Stock Exchange (Borsa Istanbul). The sample consists of 458 qualified and 1,568 unqualified audit reports over the period 2003 and 2012. The period selected can be defined as a transition period for accounting and auditing in Turkey. In the literature there are some studies on the factors affecting audit opinions. Those factors comprised both financial and non-financial data. However, besides those factors, especially in developing countries changes in accounting and auditing regulations may be a significant factor on audit opinions. Changes in regulations related to accounting and auditing by Turkish regulatory bodies is believed to increase the quality of accounting information and auditing. However, every change in regulation creates some problems in application. This transition period serves an opportunity for the researchers to analyze possible effects of the transition on audit reports. In this study relationships between these changes and audit opinions are searched.

Key Words: Qualified reports, modified audit reports, logistic regression
JEL Classification: C 35, M 42
1. Introduction

The development of the Turkish economy has been accelerated in the past two decades. However, the economy had many structural problems. As the economy grew the need to overcome these structural problems increased. Towards this need many revisions made to contribute the sustainability of the economic developments. All these progresses also affected the accounting profession. Most of the significant developments in Turkish accounting and capital markets took place in the last 25 years. Istanbul Stock Exchange (ISE) established in 1986, and the law that regulates the accounting profession was released in 1989. The first statutory audit requirement was put into force for the banks in 1987. In the same year Turkish Security Exchange Commission (TSEC) issued the first standards for auditing. This standard set became ineffective when the Board enforced new auditing standards in 1996. After the Enron case the Board issued new rules to assure the auditor independence in 2002.

This study is aimed to extent the related auditing literature by searching the effects of accounting and auditing standards changes on the audit reports. In this study the types of opinions given during the periods between 2003 and 2012 were searched. This period can be defined as a transition period for accounting and auditing. Turkish Security Exchange Commission, the regulatory body for the public firms in Turkey, was released a new accounting standards set in 2002 that requires the firms to publish their annual accounts according to this new set after 2005. Nevertheless, TSEC gave the firms an option to apply the new standards after 2003. On the other hand, TSEC is also the regulatory party for deciding the auditing standards. In 2005, TSEC released new auditing standards and required the audit firms to follow these new rules in the audit of 2006 annual reports. New accounting and auditing standards set by Turkish SEC is believed to increase the quality of accounting information and auditing. However every new thing will bring its problems. This transition period serves us an opportunity to analyze possible effects of the transition on audit reports. We look for any relationships between these changes and audit reports given.

The aim of this study is to form a model based on some company characteristics and related indicators, such as accounting standard change, auditing standard change, and auditor change, to explain the audit opinions given in Turkish capital market. The model would serve audit report readers in realizing the potential factors influential on the opinion given, and estimating the a priori audit opinion.

This paper organized as follows: the first section summarizes the related literature. In the second section we discuss the methodology and the data. The empirical results presented in the third section, and in the final section conclusions are given.
2. Literature Review

There are different studies on audit reports. Researchers interested in both the effects of audit reports on capital markets and the factors affect the audit opinion. Laitinen & Laitinen (1998) classified the studies on qualified audit reports in three categories:
a. Using audit report information to construct bankruptcy (financial failure) models
b. Constructing bankruptcy (financial failure) models and using them for predicting audit qualifications.
c. Models trying to explain audit qualifications.

Beside these categories the audit qualifications (or audit report information) and stock price information relationships, and audit firm change and qualified audit report issuance were also studied. We can summarize all these studies in two broad categories. First one is determination of the factors that affect or have a relationship with the formation of the audit opinions. Second category will be the effects of the audit opinions, such as stock prices and audit firm (audit firm change).

Researchers have been studied the financial and nonfinancial factors affecting the audit opinions. This resulted in development of several models to explain the qualifications (modifications) of audit opinions. Dopuch et al. (1987) used a probit model for predicting audit qualifications with financial and market variables. Laitinen & Laitinen (1998) developed a logistic model based mostly on financial statement information to identify the qualified audit reports in Finland. In their study a total of 17 variables (14 financial statement variable, and audit lag, bankruptcy risk measure, number of employees) were used to predict the qualified audit opinions. Their logistic model showed that the likelihood of receiving a qualified opinion is large when the firm has a low growth rate, smaller number of employees, and its share of equity percent is smaller.

Kleinman & Anandarajan (1999) studied the ability of nonfinancial factors to discriminate between unqualified audit opinion and going-concern modification when the firm is in financial distress. They found empirical evidence for discriminating between unqualified opinion and going concern modification. Spathis (2003) investigated the firm litigation and some company characteristics in predicting the probability of audit report qualification. The results of the study argue that firm litigation, financial distress and current year losses are the variables that could be the possible indicators.

Chan and Walter (1996) found that the firm size, profitability, liquidity, and indebtedness have an explanatory power for predicting the qualifications. The firms that are smaller have low profitability, liquidity, and high indebtedness more likely receive a qualified opinion. Ireland (2003) found some similar and some distinctive results. Ireland examined the determinants of the audit reports and found that large companies, highly geared companies,
and companies that had audit modifications in prior years are more likely to receive audit modification.

Ballesta and Garcia-Meca (2005) studied whether audit qualifications are influenced by the corporate governance characteristics of non-financial Spanish listed firms in the Madrid Stock Exchange. Their findings show that the probability of obtaining an unqualified report is related with having a family member on the board and the proportion of common shares held by board of directors (insider ownership). They found that higher insider ownership decreases the likelihood of receiving qualified opinions. Conversely, the family members on the board increase the probability of having a qualified opinion.

Farragia and Baldacchino (2005) searched for any relationship between audit report qualifications and some firm characteristics. They analyzed the type of qualifications in Malta between the years 1997 and 2000. Their results demonstrate that 19.9% of the firms analyzed were given a qualified opinion. Li et al. (2008) studied on the relationship between audit firm size and audit opinions in China. Their findings suggest that larger audit firms tend to issue more qualified (modified) opinions than smaller firms.

The audit reports have been subject of researchers, however, in Turkey there were not enough studies on this subject. Uyar & Çelik (2009) studied the relationship between audit opinions and audit firms. They find that unqualified reports and unqualified with explanatory paragraph reports were rendered by Big 4 firms, and other modified audit opinions were rendered by other audit firms. The results are not consistent with the ones that are carried out in other developing countries. In the research one year data were used.

In another study Aygören & Uyar (2007) searched the effect of audit opinions on the stock returns in the ISE.

A meta-analysis on 73 published studies from 1982 to 2011 made by Ahsan Habib (2013) revealed that studies categorized the explanatory variables into auditor and audit-related variables, and firm specific variables. Although there is less consensus on auditor and audit-related variables, the big N affiliation, audit report lag had positive association with modified audit opinion, and a negative association was observed for non-audit fees. Firm size, profitability, bankruptcy and default probability as firm specific variables were observed to have positive effect on qualified opinion issuance.

All the studies focus on the some factors that can affect the audit opinion and tried to demonstrate the relationship between opinions and those factors which were mainly company characterized factors. However, besides these factors especially in developing countries changes in accounting and auditing standards may be a significant factor.
3. Methodology

3.1 Research Questions

In this paper it is aimed to analyze firm specific and audit related factors that affect audit qualifications. Besides, the effect of changes in regulations on audit report will be examined.

3.2 Data

In Turkey statutory audit is required only a small number of companies. Most of these companies are required to Turkish Capital Market Law (TCML). However, only the financial statements and audit opinions of the firms that are listed on the ISE are available to the public, and thus the researchers. Because of this constraint the studies are generally limited to the ISE firms.

In this study all the firms listed on the ISE over the period 2003 – 2012 were analyzed. The number of the firms listed on the ISE varied due to the initial public offerings, and bankruptcies. Due to different reasons, the financial statements and audit reports of some firms did not released on the website of the ISE. Therefore the number of the firms varied in each year. The data were collected from the audited financial statements and their accompanying notes including the audit reports. Those statements were uploaded from the website of the ISE\(^1\) and Public Disclosure Platform\(^2\).

In Table 1, we Show the Total Reports Classified by Year and Type of Audit Opinion

<table>
<thead>
<tr>
<th>Years</th>
<th>Unqualified</th>
<th>Qualified</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>2003</td>
<td>170</td>
<td>81.34</td>
<td>39</td>
</tr>
<tr>
<td>2004</td>
<td>177</td>
<td>81.20</td>
<td>41</td>
</tr>
<tr>
<td>2005</td>
<td>175</td>
<td>77.10</td>
<td>52</td>
</tr>
<tr>
<td>2006</td>
<td>172</td>
<td>76.11</td>
<td>54</td>
</tr>
<tr>
<td>2007</td>
<td>179</td>
<td>78.51</td>
<td>49</td>
</tr>
<tr>
<td>2008</td>
<td>162</td>
<td>72.65</td>
<td>61</td>
</tr>
<tr>
<td>2009</td>
<td>170</td>
<td>77.99</td>
<td>48</td>
</tr>
<tr>
<td>2010</td>
<td>174</td>
<td>81.31</td>
<td>40</td>
</tr>
<tr>
<td>2011</td>
<td>171</td>
<td>81.11</td>
<td>41</td>
</tr>
<tr>
<td>2012</td>
<td>176</td>
<td>84.22</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>1,568</td>
<td>77.40</td>
<td>458</td>
</tr>
</tbody>
</table>

3.3 Model and the Variables

Researchers constructed different models to explain the audit qualifications. In these models several financial and non-financial company characteristics were used to estimate the audit qualification. Large number of variables may cause problems on the development of an effective model. Thus, we selected the variables that are found as explanatory variables in

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\(^1\) www.imkb.gov.tr

\(^2\) www.kap.gov.tr
previous studies. However, we added auditing and accounting standards, and consolidation in our model variables.

The Variables Used in our Analysis are Shown in Table 2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
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<tbody>
<tr>
<td>DEBT RATIO</td>
<td>X1 It is the ratio of the total debt (book value) of the firm to the total assets (book value).</td>
</tr>
<tr>
<td>NET SALES</td>
<td>X2 Net sales of the firm</td>
</tr>
<tr>
<td>SALES GROWTH</td>
<td>X3 Sales growth ratio of the firm</td>
</tr>
<tr>
<td>TOTAL ASSETS</td>
<td>X4 Total assets of the firm</td>
</tr>
<tr>
<td>ASSET GROWTH</td>
<td>X5 Asset growth ratio of the firm</td>
</tr>
<tr>
<td>PROFITABILITY</td>
<td>X6 It is measured as total income divided by total expense, thus if the result is higher than 1 it is profitable and its profitability ratio is also observed.</td>
</tr>
<tr>
<td>AUDIT FIRM</td>
<td>X7 The audit firms are classified as Big N and other audit firms.</td>
</tr>
<tr>
<td>CONSOLIDATION</td>
<td>X8 The consolidated and unconsolidated financial statements are classified.</td>
</tr>
<tr>
<td>ACCOUNTING STANDARD</td>
<td>X9 There are three general set of standards are observed during the period. Historical cost based standards, standards that are compatible to IFRS and IFRS based standards</td>
</tr>
<tr>
<td>AUDITING STANDARD</td>
<td>X10 There is two sets of auditing standards observed during the period. The later one is identical to International Auditing Standards</td>
</tr>
</tbody>
</table>

3.4 Firm Size
Firm size is considered as an influential factor for predicting audit qualifications. This is due to the perception that larger firms assumed to have a more strong corporate structure and internal control system that leads fewer misstatements. In a study Doyle et al. (2007) found that with some other factors the firms’ size (small firms) was an explanatory factor for weaknesses in internal control. On the other hand in their study on small companies Keasey et al. (1988) debate that larger firms have a greater public visibility thus probability of receiving an audit qualification is higher for large firms.

3.5 Audit Firm
The big audit firms, now named as big-four, are perceived as performing quality audits. The rational under this perception may depend on the knowledge, human resources, and financial resources held by these firms. Besides, it is thought that big audit firms are more flexible to issue a modified report because of their financial wealth. However, someone may debate that their financial wealth dependent to their clients, thus they hesitate to give a modified opinion because of losing their clients. Enron & Arthur Andersen case was a significant evidence for the defenders of this reasoning (belief). Nevertheless, it is obvious that, the audit firms’ size has an effect on opinion issued, but there is a debate on the direction of this effect.
3.6 Profitability

Profitability is a crucial factor for the survival of the firm. Profitability is thought to positively relate with management success, and thus management compensation is developed countries. However that is not the fact in Turkey’s economic environment. The management is Turkish firms generally comprises a number of family members. In previous studies the profitability and audit qualifications were studied, and some empirical evidence found that low profitability lead to audit qualifications.

3.7 Liquidity

Liquidity measures had been studied in some previous studies in predicting the audit opinion qualifications. Traditional liquidity measures used in accounting and auditing research are current and quick ratios. However, the cash flow statement originated ratios would be better indicator of firm’s liquidity. Thus, in this study two liquidity measures are used: current ratio and cash flow from operating activities/gross profit.

3.8 Standard Change

Both the audit firms and their clients in developing countries exposed to accounting and auditing standard changes. These changes are more comprehensive than the ones in the developed countries. The effect of these changes on the financial reporting and auditing has not been explored sufficiently. In the previous studies Chan and Walter (1996) searched the effect of accounting policy changes on the audit reports.

3.9 Indebtedness

The high gearing companies are assumed to subject more qualifications. The high debt ratio of the company especially in adverse economic conditions may result in going concern problems, thus auditors qualify their opinions.

3.10 Growth of the Company

The high rate of growth may lead some problems in financial statements. High growth rate may increase inherent risk of the company, and that may result in significant misstatements. However, the study of Laitinen and Laitinen (1998) in Finland showed that likelihood of receiving qualified opinions increases with the low growth rate.

References


Laitinen, Erkki k. & Laitinen, Teija (1998), ‘Qualified Audit Reports in Finland: Evidence from Large Companies’, The European Accounting Review, Vol.7 No.4, 639-653

